

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 15280-339PC	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 98/ 25270	International filing date (day/month/year) 25/11/1998	(Earliest) Priority Date (day/month/year) 01/12/1997
Applicant THE GOVERNMENT OF THE UNITED STATES OF.. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☒ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☒ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 76-87 are directed to a method of treatment of the human/animal body, and although claims 88-96 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/13 C07K16/30 A61K47/48 G01N33/574 G01N33/563
G01N33/58 A61K39/395 C12N1/11 C12N5/10 C12N15/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07K A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>BRINKMANN U ET AL: "Cloning and expression of the recombinant FAb fragment of monoclonal antibody K1 that reacts with mesothelin present on mesothelioma and ovarian cancers." INTERNATIONAL JOURNAL OF CANCER, (1997 MAY 16) 71 (4) 638-44. JOURNAL CODE: GQU. ISSN: 0020-7136., XP002102002 United States see abstract; figure 1; results and discussion see abstract see "materials and methods" starting at page 638; figure 1 and discussion --- -/--</p>	1-98



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

5 May 1999

Date of mailing of the international search report

26. 05. 99

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Muller-Thomalla, K

INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 92 07081 A (UNITED STATES DEPT. OF COMMERCE, USA) 30 April 1992 see page 3, line 7 - page 4, line 29 see page 9, line 8-9 see tables 3,6,7 see claims 1-20 ---	1-98
X	CHANG K ET AL: "Characterization of the antigen (CAK1) recognized by monoclonal antibody K1 present on ovarian cancers and normal mesothelium." CANCER RESEARCH, (1992 JAN 1) 52 (1) 181-6. JOURNAL CODE: CNF. ISSN: 0008-5472., XP002038950 United States see abstract see "materials and methods" starting at page 181 and "discussion" starting at page 184 ---	1-98
X	WO 97 34634 A (SLOAN KETTERING INST. CANCER RES.) 25 September 1997 see page 11 - page 19; claims 1-16 ---	1-98
A	JANIS KUBY: "Immunology" 1994 , W.H. FREEMAN AND COMPANY NEW YORK , UNITED STATES OF AMERICA XP002102007 see page 136 - page 139 ---	1,18,20, 76,98
X,P	DATABASE EMBL (EMPRO) EMBL, Heidelberg Accession Number AF035617,, 10 March 1998 CHOWDHURY P.S.: XP002102008 see nucleotide sequence ---	13-17, 34,37,38
X,P	CHOWDHURY P S ET AL: "Isolation of a high-affinity stable single-chain Fv specific for mesothelin from DNA-immunized mice by phage display and construction of a recombinant immunotoxin with anti-tumor activity." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1998 JAN 20) 95 (2) 669-74. JOURNAL CODE: PV3. ISSN: 0027-8424., XP002102004 United States cited in the application see the whole document --- -/--	1-98

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	CHOWDHURY P S ET AL: "Improved stability and yield of a Fv-toxin fusion protein by computer design and protein engineering of the Fv." JOURNAL OF MOLECULAR BIOLOGY, (1998 SEP 4) 281 (5) 917-28. JOURNAL CODE: J6V. ISSN: 0022-2836., XP002102005 ENGLAND: United Kingdom see the whole document ---	1-98
X,P	CHOWDHURY P S ET AL: "Isolation of anti-mesothelin antibodies from a phage display library." MOLECULAR IMMUNOLOGY, (1997 JAN) 34 (1) 9-20. JOURNAL CODE: NG1. ISSN: 0161-5890., XP002102006 ENGLAND: United Kingdom cited in the application see the whole document -----	1-98

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Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9207081 A	30-04-1992	AT 171207 T	15-10-1998
		AU 648363 B	21-04-1994
		AU 8921991 A	20-05-1992
		CA 2093928 A	13-04-1992
		DE 69130224 D	22-10-1998
		EP 0554356 A	11-08-1993
		ES 2121792 T	16-12-1998
		JP 2660241 B	08-10-1997
		JP 6506824 T	04-08-1994
		US 5525337 A	11-06-1996
		US 5817313 A	06-10-1998
		US 5320956 A	14-06-1994

WO 9734634 A	25-09-1997	NONE	
